

UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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| APPLICATION NO. | FILING DATE 273 06/27/97 | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|--------------------------------|--------------------------|----------------------|---------------------------------------|
| MIR H F FENWICK TWO PALO | RAUBVOGEL | LM02/0208 7 | EXAMINER TUNIS ART UNIT PAPER NUMBER |
| , , | | | 02/08/99 DATE MAILED: |

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

| | Application No. | Applicant(s) |
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| | 884.573 | Swanson |
| Office Action Summary | Examiner | Group Art Unit |
| | K. /4 | mg 2773 |
| -The MAILING DATE of this communication app | ears on the cover sheet l | beneath the correspondence address— |
| Period for Response | : | • |
| A SHORTENED STATUTORY PERIOD FOR RESPONSE IS MAILING DATE OF THIS COMMUNICATION. | S SET TO EXPIRE | MONTH(S) FROM THE |
| Extensions of time may be available under the provisions of 37 CF from the mailing date of this communication. If the period for response specified above is less than thirty (30) date of the period for response is specified above, such period shall, by | ays, a response within the statut default, expire SIX (6) MONTH: | tory minimum of thirty (30) days will be considered timely S from the mailing date of this communication . |
| Failure to respond within the set or extended period for response v Status | vill, by statute, cause the applica | ation to become ABANDONED (35 U.S.C. § 133). |
| Responsive to communication(s) filed on | -11-99 | |
| Hesponsive to communication(s) filed on | | • |
| ☐ This action is FINAL. | | |
| Since this application is in condition for allowance exce accordance with the practice under Ex parte Quayle, 1 | | |
| Disposition of Claims | | |
| Claim(s) | is/are pending in the application. | |
| Of the above claim(s) | is/are withdrawn from consideration. | |
| ≥ €laim(s) | is/are allowed. | |
| Claim(s) [-17, 19- | 29 | is/are rejected. |
| Olalili(3) | | |
| - | | is/are objected to. |
| ☐ Claim(s) | | • |
| ☐ Claim(s)———————————————————————————————————— | | • |
| ☐ Claim(s)———————————————————————————————————— | | are subject to restriction or election |
| ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) Application Papers ☐ See the attached Notice of Draftsperson's Patent Draw | ring Review, PTO-948. | are subject to restriction or election requirement. |
| ☐ Claim(s)———————————————————————————————————— | ving Review, PTO-948. | are subject to restriction or election requirement. |
| ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) ☐ Application Papers ☐ See the attached Notice of Draftsperson's Patent Draw ☐ The proposed drawing correction, filed on | ving Review, PTO-948. | are subject to restriction or election requirement. |
| ☐ Claim(s)———————————————————————————————————— | ving Review, PTO-948. 7 7 is Approved ected to by the Examiner. | are subject to restriction or election requirement. |
| ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) ☐ See the attached Notice of Draftsperson's Patent Draw ☐ The proposed drawing correction, filed on is/are obj ☐ The drawing(s) filed on is/are obj ☐ The specification is objected to by the Examiner. ☐ The oath or declaration is objected to by the Examiner. | ving Review, PTO-948. 7 7 is Approved ected to by the Examiner. | are subject to restriction or election requirement. |
| ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) ☐ See the attached Notice of Draftsperson's Patent Draw The proposed drawing correction, filed on | ving Review, PTO-948. 2 | are subject to restriction or election requirement. disapproved. |
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| ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) ☐ Claim(s) ☐ See the attached Notice of Draftsperson's Patent Draw ☐ The proposed drawing correction, filed on ☐ is/are obj ☐ The drawing(s) filed on ☐ is/are obj ☐ The specification is objected to by the Examiner. ☐ The oath or declaration is objected to by the Examiner. ☐ The oath or declaration is objected to by the Examiner. ☐ Priority under 35 U.S.C. § 119 (a)-(d) ☐ Acknowledgment is made of a claim for foreign priority ☐ All ☐ Some* ☐ None of the CERTIFIED copies ☐ received. ☐ received in Application No. (Series Code/Serial Num ☐ received in this national stage application from the In*Certified copies not received: ☐ Attachment(s) | ving Review, PTO-948. 7 7 is proved ected to by the Examiner. under 35 U.S.C. § 11 9(a)- of the priority documents have the priority documen | are subject to restriction or election requirement. disapproved. (d). ave been Rule 1 7.2(a)). |

Office Action Summary

Application/Control Number: 884,573

Art Unit: 2773

DETAILED ACTION

1. The amendment filed 1/11/99 has been considered in preparing this Office action.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-17 and 19-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted Prior Art, Fig. 1 of the drawing (hereinafter "Prior Art") in view of Nagashima (5,422,997) or Wilde (5,828,382) or Wang et al (5,745,739).

Prior Art teaches a system (Fig. 1) comprising a CPU (80); a display processor (60); a video controller (20); a CRT monitor (30); a bus (50); and a system memory (40) includes an address decoder (46) and a frame buffer portion (45). However, Prior Art fails to explicitly teach a remapping device for converting a first address to a second address. This is what Nagashima, Wilde or Wang et al teaches. Nagashima teaches a 2D address converter for converting XY address into physical address (col. 9, lines 8-12). Wilde teaches information stored in display memory or frame buffer are addressed and use a tile memory format and information stored in host main memory are stored in tile linear format (col. 5, lines 54-59) and thus, the address converter is inherent in view of

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the different formats for host memory and display memory. Wang et al teaches an address generator

(136) for performing 2D virtual coordinate to linear physical memory address conversion. It is noted

that the phantom port of present invention is nothing more than an address converter of prior art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the present

invention was made to combine the teachings of Nagashima, Wilde or Wang et al into the system of

Prior Art in order to convert address from one kind to another and thus to more effectively access

the frame buffer memory. Therefore, claims 1-3, 5-7, 10-15, 19-22, 24-25 and 27-28 would have

been obvious.

Claim 4 requires the phantom port has a span size equal to a power of two which would be

obvious of, if not inherent to, due to the teachings of Nagashima, Wilde or Wang et al because the

size of the buffer is always equal to a power of two.

Claims 8-9, 16-17, 23, 26 and 29 are similar in scope to claim 4, and thus is rejected under

similar rationale.

Response to Arguments

4. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view

of the new ground(s) of rejection.

Responses

5. Responses to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, D.C. 20231.

If applicant desires to fax a response, (703) 308-9051(52) may be used for formal communications or (703) 308-6606 for informal or draft communications.

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Inquires

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kee M. Tung** whose telephone number is (703) **305-9660**. The examiner can normally be reached on **Monday - Thursday** from **7:30 am to 5:00 pm**. The examiner can also be reached on alternate **Friday**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim, can be reached on (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

February 3, 1999

Kee M. Tung
Primary Examiner

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